Matthew F Krummel

List of Publications by Year in Descending Order

110 papers	12,643 citations	42 h-index	112 g-index
134 ext. papers	17,100 ext. citations	19.7 avg, IF	6.52 L-index

#	Paper	IF	Citations
110	Holistic Characterization of Tumor Monocyte-to-Macrophage Differentiation Integrates Distinct Immune Phenotypes in Kidney Cancer.. *Cancer Immunology Research*, **2022**, 10, 403-419	12.5	0
109	Tumor-associated macrophage heterogeneity is driven by tissue territories in breast cancer. *Cell Reports*, **2022**, 39, 110865	10.6	0
108	Discovering dominant tumor immune archetypes in a pan-cancer census.. *Cell*, **2021**,	56.2	10
107	Targeting TREM2 on tumor-associated macrophages enhances immunotherapy. *Cell Reports*, **2021**, 37, 109844	10.6	6
106	Archetypes of checkpoint-responsive immunity. *Trends in Immunology*, **2021**, 42, 960-974	14.4	0
105	Activating Immune Recognition in Pancreatic Ductal Adenocarcinoma via Autophagy Inhibition, MEK Blockade, and CD40 Agonism. *Gastroenterology*, **2021**,	13.3	1
104	Learned adaptive multiphoton illumination microscopy for large-scale immune response imaging. *Nature Communications*, **2021**, 12, 1916	17.4	5
103	An expanded universe of cancer targets. *Cell*, **2021**, 184, 1142-1155	56.2	38
102	A tumor-specific mechanism of T enrichment mediated by the integrin 8. *Science Immunology*, **2021**, 6,	28	2
101	Impaired antibacterial immune signaling and changes in the lung microbiome precede secondary bacterial pneumonia in COVID-19 **2021**,		5
100	Impaired immune signaling and changes in the lung microbiome precede secondary bacterial pneumonia in COVID-19 **2021**,		2
99	DNGR-1 limits Flt3L-mediated antitumor immunity by restraining tumor-infiltrating type I conventional dendritic cells **2021**, 9,		5
98	The WAVE complex associates with sites of saddle membrane curvature. *Journal of Cell Biology*, **2021**, 220,	7.3	9
97	SARS-CoV-2 infection studies in lung organoids identify TSPAN8 as novel mediator **2021**,		6
96	Global absence and targeting of protective immune states in severe COVID-19. *Nature*, **2021**, 591, 124-130	50.4	100
95	A "data sharing trust" model for rapid, collaborative science. *Cell*, **2021**, 184, 566-570	56.2	2
94	Longitudinal single-cell epitope and RNA-sequencing reveals the immunological impact of type 1 interferon autoantibodies in critical COVID-19 **2021**,		9

93	Tracheal aspirate RNA sequencing identifies distinct immunological features of COVID-19 ARDS. *Nature Communications*, **2021**, 12, 5152	17.4	7
92	Layilin Anchors Regulatory T Cells in Skin. *Journal of Immunology*, **2021**, 207, 1763-1775	5.3	0
91	Type I interferon autoantibodies are associated with systemic immune alterations in patients with COVID-19. *Science Translational Medicine*, **2021**, 13, eabh2624	17.5	34
90	Active surveillance characterizes human intratumoral T cell exhaustion. *Journal of Clinical Investigation*, **2021**, 131,	15.9	5
89	Tumor Immune Profiling-Based Neoadjuvant Immunotherapy for Locally Advanced Melanoma. *Annals of Surgical Oncology*, **2020**, 27, 4122-4130	3.1	5
88	Visualizing Synaptic Transfer of Tumor Antigens among Dendritic Cells. *Cancer Cell*, **2020**, 37, 786-799.e5	24.3	48
87	Carpet-bombing tumors with IFN-□ *Nature Cancer*, **2020**, 1, 270-272	15.4	
86	ZipSeq: barcoding for real-time mapping of single cell transcriptomes. *Nature Methods*, **2020**, 17, 833-843	21.6	33
85	Reinvigorating NIH Grant Peer Review. *Immunity*, **2020**, 52, 1-3	32.3	13
84	Global Absence and Targeting of Protective Immune States in Severe COVID-19 **2020**,		1
83	Global Absence and Targeting of Protective Immune States in Severe COVID-19 **2020**,		3
82	Spacer-Mediated Control of Coumarin Uncaging for Photocaged Thymidine. *Journal of Organic Chemistry*, **2020**, 85, 2945-2955	4.2	7
81	mDia1/3-dependent actin polymerization spatiotemporally controls LAT phosphorylation by Zap70 at the immune synapse. *Science Advances*, **2020**, 6, eaay2432	14.3	7
80	The NK cell-cancer cycle: advances and new challenges in NK cell-based immunotherapies. *Nature Immunology*, **2020**, 21, 835-847	19.1	98
79	SCENITH: A Flow Cytometry-Based Method to Functionally Profile Energy Metabolism with Single-Cell Resolution. *Cell Metabolism*, **2020**, 32, 1063-1075.e7	24.6	43
78	Lessons of COVID-19: A roadmap for post-pandemic science. *Journal of Experimental Medicine*, **2020**, 217,	16.6	4
77	Dendritic cells in cancer immunology and immunotherapy. *Nature Reviews Immunology*, **2020**, 20, 7-24	36.5	589
76	Pulmonary environmental cues drive group 2 innate lymphoid cell dynamics in mice and humans. *Science Immunology*, **2019**, 4,	28	54

75	Unleashing Type-2 Dendritic Cells to Drive Protective Antitumor CD4 T Cell Immunity. *Cell*, **2019**, 177, 556-571.e16	56.2	195
74	Immunity as a continuum of archetypes. *Science*, **2019**, 364, 28-29	33.3	15
73	Tuning the Tumor Myeloid Microenvironment to Fight Cancer. *Frontiers in Immunology*, **2019**, 10, 1611	8.4	53
72	Regulatory T cells use arginase 2 to enhance their metabolic fitness in tissues. *JCI Insight*, **2019**, 4,	9.9	27
71	Adventitial Stromal Cells Define Group 2 Innate Lymphoid Cell Tissue Niches. *Immunity*, **2019**, 50, 707-722.e6	32.3	133
70	Universal Principled Review: A Community-Driven Method to Improve Peer Review. *Cell*, **2019**, 179, 1441-1445	56.2	4
69	Macrophages promote epithelial proliferation following infectious and non-infectious lung injury through a Trefoil factor 2-dependent mechanism. *Mucosal Immunology*, **2019**, 12, 64-76	9.2	27
68	Trefoil Factor 2 Promotes Type 2 Immunity and Lung Repair through Intrinsic Roles in Hematopoietic and Nonhematopoietic Cells. *American Journal of Pathology*, **2018**, 188, 1161-1170	5.8	10
67	Understanding the tumor immune microenvironment (TIME) for effective therapy. *Nature Medicine*, **2018**, 24, 541-550	50.5	1772
66	TIM-3 Regulates CD103 Dendritic Cell Function and Response to Chemotherapy in Breast Cancer. *Cancer Cell*, **2018**, 33, 60-74.e6	24.3	141
65	Paracrine costimulation of IFN-β signaling by integrins modulates CD8 T cell differentiation. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, 11585-11590	11.5	28
64	Subcellular Localization of Antigen in Keratinocytes Dictates Delivery of CD4 T-cell Help for the CTL Response upon Therapeutic DNA Vaccination into the Skin. *Cancer Immunology Research*, **2018**, 6, 835-847	12.5	7
63	A natural killer-dendritic cell axis defines checkpoint therapy-responsive tumor microenvironments. *Nature Medicine*, **2018**, 24, 1178-1191	50.5	404
62	Control of an Unusual Photo-Claisen Rearrangement in Coumarin Caged Tamoxifen through an Extended Spacer. *ACS Chemical Biology*, **2017**, 12, 1001-1010	4.9	32
61	Visualizing dynamic microvillar search and stabilization during ligand detection by T cells. *Science*, **2017**, 356,	33.3	133
60	The Lung is a Host Defense Niche for Immediate Neutrophil-Mediated Vascular Protection. *Science Immunology*, **2017**, 2,	28	96
59	The lung is a site of platelet biogenesis and a reservoir for haematopoietic progenitors. *Nature*, **2017**, 544, 105-109	50.4	541
58	Partially exhausted tumor-infiltrating lymphocytes predict response to combination immunotherapy. *JCI Insight*, **2017**, 2,	9.9	44

57	Critical Role for CD103(+)/CD141(+) Dendritic Cells Bearing CCR7 for Tumor Antigen Trafficking and Priming of T Cell Immunity in Melanoma. *Cancer Cell*, **2016**, 30, 324-336	24.3	426
56	Visualization of immediate immune responses to pioneer metastatic cells in the lung. *Nature*, **2016**, 531, 513-7	50.4	247
55	T cell migration, search strategies and mechanisms. *Nature Reviews Immunology*, **2016**, 16, 193-201	36.5	208
54	STAT3 Establishes an Immunosuppressive Microenvironment during the Early Stages of Breast Carcinogenesis to Promote Tumor Growth and Metastasis. *Cancer Research*, **2016**, 76, 1416-28	10.1	60
53	A septin requirement differentiates autonomous and contact-facilitated T cell proliferation. *Nature Immunology*, **2016**, 17, 315-22	19.1	16
52	Tumor-infiltrating lymphocytes are dynamically desensitized to antigen but are maintained by homeostatic cytokine. *JCI Insight*, **2016**, 1, e89289	9.9	17
51	Spatiotemporal Rank Filtering Improves Image Quality Compared to Frame Averaging in 2-Photon Laser Scanning Microscopy. *PLoS ONE*, **2016**, 11, e0150430	3.7	4
50	Tracking the Spatial and Functional Gradient of Monocyte-To-Macrophage Differentiation in Inflamed Lung. *PLoS ONE*, **2016**, 11, e0165064	3.7	6
49	Micro-Magellan: open-source, sample-adaptive, acquisition software for optical microscopy. *Nature Methods*, **2016**, 13, 807-809	21.6	13
48	CCR2 Influences T Regulatory Cell Migration to Tumors and Serves as a Biomarker of Cyclophosphamide Sensitivity. *Cancer Research*, **2016**, 76, 6483-6494	10.1	46
47	CXCR4 identifies transitional bone marrow premonocytes that replenish the mature monocyte pool for peripheral responses. *Journal of Experimental Medicine*, **2016**, 213, 2293-2314	16.6	66
46	iNKT Cell Emigration out of the Lung Vasculature Requires Neutrophils and Monocyte-Derived Dendritic Cells in Inflammation. *Cell Reports*, **2016**, 16, 3260-3272	10.6	42
45	Antigen recognition in the islets changes with progression of autoimmune islet infiltration. *Journal of Immunology*, **2015**, 194, 522-30	5.3	24
44	TGF-Dependent Dendritic Cell Chemokinesis in Murine Models of Airway Disease. *Journal of Immunology*, **2015**, 195, 1182-90	5.3	18
43	The emerging understanding of myeloid cells as partners and targets in tumor rejection. *Cancer Immunology Research*, **2015**, 3, 313-9	12.5	37
42	Adaptive Immune Regulation of Mammary Postnatal Organogenesis. *Developmental Cell*, **2015**, 34, 493-504	10.2	60
41	The subtle hands of self-reactivity in peripheral T cells. *Nature Immunology*, **2015**, 16, 10-1	19.1	1
40	Mast cells present protrusions into blood vessels upon tracheal allergen challenge in mice. *PLoS ONE*, **2015**, 10, e0118513	3.7	8

39	A critical role for dendritic cells in the evolution of IL-1-mediated murine airway disease. *Journal of Immunology*, **2015**, 194, 3962-9	5.3	8
38	Chitin activates parallel immune modules that direct distinct inflammatory responses via innate lymphoid type 2 and T cells. *Immunity*, **2014**, 40, 414-24	32.3	183
37	Dissecting the tumor myeloid compartment reveals rare activating antigen-presenting cells critical for T cell immunity. *Cancer Cell*, **2014**, 26, 638-52	24.3	592
36	Detection of rare antigen-presenting cells through T cell-intrinsic meandering motility, mediated by Myo1g. *Cell*, **2014**, 158, 492-505	56.2	82
35	The spatiotemporal cellular dynamics of lung immunity. *Trends in Immunology*, **2014**, 35, 379-86	14.4	18
34	Assessing and benchmarking multiphoton microscopes for biologists. *Methods in Cell Biology*, **2014**, 123, 135-51	1.8	1
33	Leukotriene B4 amplifies eosinophil accumulation in response to nematodes. *Journal of Experimental Medicine*, **2014**, 211, 1281-8	16.6	42
32	Modes and mechanisms of T cell motility: roles for confinement and Myosin-IIA. *Current Opinion in Cell Biology*, **2014**, 30, 9-16	9	30
31	Deficiency of RAMP1 attenuates antigen-induced airway hyperresponsiveness in mice. *PLoS ONE*, **2014**, 9, e102356	3.7	30
30	Type 2 innate lymphoid cells control eosinophil homeostasis. *Nature*, **2013**, 502, 245-8	50.4	652
29	Evolving immune circuits are generated by flexible, motile, and sequential immunological synapses. *Immunological Reviews*, **2013**, 251, 80-96	11.3	10
28	Secondary T cell-T cell synaptic interactions drive the differentiation of protective CD8+ T cells. *Nature Immunology*, **2013**, 14, 356-63	19.1	95
27	Regulation of T-cell receptor signaling by the actin cytoskeleton and poroelastic cytoplasm. *Immunological Reviews*, **2013**, 256, 148-59	11.3	20
26	Activated T cell trans-endothelial migration relies on myosin-IIA contractility for squeezing the cell nucleus through endothelial cell barriers. *PLoS ONE*, **2013**, 8, e75151	3.7	42
25	Live imaging of the lung. *Current Protocols in Cytometry*, **2012**, Chapter 12, Unit12.28	3.6	30
24	Integration of the movement of signaling microclusters with cellular motility in immunological synapses. *Nature Immunology*, **2012**, 13, 787-95	19.1	72
23	Marginating dendritic cells of the tumor microenvironment cross-present tumor antigens and stably engage tumor-specific T cells. *Cancer Cell*, **2012**, 21, 402-17	24.3	233
22	Spatiotemporally separated antigen uptake by alveolar dendritic cells and airway presentation to T cells in the lung. *Journal of Experimental Medicine*, **2012**, 209, 1183-99	16.6	138

21	Regulation of T cell priming by lymphoid stroma. *PLoS ONE*, **2011**, 6, e26138	3.7	76
20	Stabilized imaging of immune surveillance in the mouse lung. *Nature Methods*, **2011**, 8, 91-6	21.6	265
19	Illuminating emergent activity in the immune system by real-time imaging. *Nature Immunology*, **2010**, 11, 554-7	19.1	7
18	Cell-laden microwells for the study of multicellularity in lymphocyte fate decisions. *Biomaterials*, **2010**, 31, 3422-8	15.6	26
17	The immunological synapse: a dynamic platform for local signaling. *Journal of Clinical Immunology*, **2010**, 30, 364-72	5.7	34
16	Control of cortical rigidity by the cytoskeleton: emerging roles for septins. *Cytoskeleton*, **2010**, 67, 477-86	2.4	59
15	Interactions between PD-1 and PD-L1 promote tolerance by blocking the TCR-induced stop signal. *Nature Immunology*, **2009**, 10, 1185-92	19.1	530
14	Two-photon imaging of the immune system: a custom technology platform for high-speed, multicolor tissue imaging of immune responses. *Current Topics in Microbiology and Immunology*, **2009**, 334, 1-29	3.3	30
13	A synaptic basis for paracrine interleukin-2 signaling during homotypic T cell interaction. *Immunity*, **2008**, 29, 238-48	32.3	98
12	Immunological synapses: breaking up may be good to do. *Cell*, **2007**, 129, 653-5	56.2	7
11	Maintenance and modulation of T cell polarity. *Nature Immunology*, **2006**, 7, 1143-9	19.1	146
10	Mechanisms of T cell motility and arrest: deciphering the relationship between intra- and extracellular determinants. *Seminars in Immunology*, **2005**, 17, 387-99	10.7	32
9	Dynamics of the immunological synapse: finding, establishing and solidifying a connection. *Current Opinion in Immunology*, **2002**, 14, 66-74	7.8	166
8	Imaging synapse formation during thymocyte selection: inability of CD3zeta to form a stable central accumulation during negative selection. *Immunity*, **2002**, 16, 595-606	32.3	122
7	Enhancement of antitumor immunity by CTLA-4 blockade. *Science*, **1996**, 271, 1734-6	33.3	2546
6	Imaging and Analysis of OT1 T Cell Activation on Lipid Bilayers. *Protocol Exchange*,		4
5	ZipSeq : Barcoding for Real-time Mapping of Single Cell Transcriptomes		4
4	Pulmonary natural killer cells control neutrophil intravascular motility and response to acute inflammation		2

3	WAVE complex self-organization templates lamellipodial formation	3
2	A Pan-Cancer Census of Dominant Tumor Immune Archetypes	3
1	Active Surveillance Characterizes Human Intratumoral T Cell Exhaustion	1